Advanced Flood Webinar 2016 Prerequisite Homework Assignment
Fundamentals of Remote Sensing

1. Infrared, Visible, and Microwave frequencies or wavelengths refer to

    a) Satellite Sensors
    b) Electromagnetic Radiation
    c) Satellite Orbits

2. List the types of satellite orbits

3. Satellite data levels L1 and L3 generally have the same spatial/temporal resolutions

    a) True b) False

4. Radar flying on-board a satellite is

    a) An Active Sensor
    b) A Passive Sensor

5. GPM provides global coverage of rainfall

    a) True b) False

6. MODIS provides rainfall observations

    a) True b) False

7. What do TMPA and IMERG stand for?

8. IMERG provides half-hourly rainfall data product because GPM is in geostationary orbit

    a) True b) False

9. TMPA and IMRGE do not provide rainfall at the same spatial resolution

    a) True b) False

10. MODIS is flying on these two satellites:

    a) Aqua and Terra
    b) Aqua and TRMM

c) Aqua and GPM

11. Can MODIS Near-real Time Flood mapping tool be used to monitor streamflow?

a) Yes b) No

12. Which of the following flood monitoring tools use TRMM/GPM/GCOM-W radiometer data to provide river discharge

a) Dartmouth Flood Observatory (DFO)
b) MODIS NRT Global Flood Mapping
c) TRMM Current Heavy Rain, Flood and Landslide Estimates

13. TRMM and GPM have the same sensors to observe rainfall

a) True b) False

14. What are the units of streamflow in Global Flood Monitoring System?

15. These observational quantities from MODIS are used for inundation mapping over previously dry land

a) Radar Reflectivity
b) Spectral Reflectance
c) Brightness temperature

16. MOIDS NRT Tool may not be used for inundation mapping in a stormy weather even if there is inundation occurring at the surface – Why?

17. CREST hydrological model is used for streamflow estimates by:

a) GDACS/GFDS
b) SREVIR
c) GFMS

18. MODIS Inundation Tool provides flooding information at this spatial resolution:

a) 1 km X 1 km
b) 250 m x 250 m
c) 12 km x 12 km